

*SUBFAMILY PORIZONTINAE*

GENUS CHAROPS HOLMGREN (1959)

The genus charops Holmgren belongs to the tribe compoplegini of the subfamily porizontinae of the family Ichneumonidae (Hymenoptera). This is a moderately large genus, of almost world wide distribution, but the majority of species occur in tropics. In the oriental region it has been reported from almost parts. They are larval parasites.

Morley (1913) included three species under charops from India. Townes, Townes and Gupta (1961) recorded eleven species of this genus from the Oriental region of these two were reported from India and another two from Sri Lanka. Gupta and Maheshwary (1970) recorded eight species from India.

Charops rogosopunctatum sp. nov. (Fig. 10)

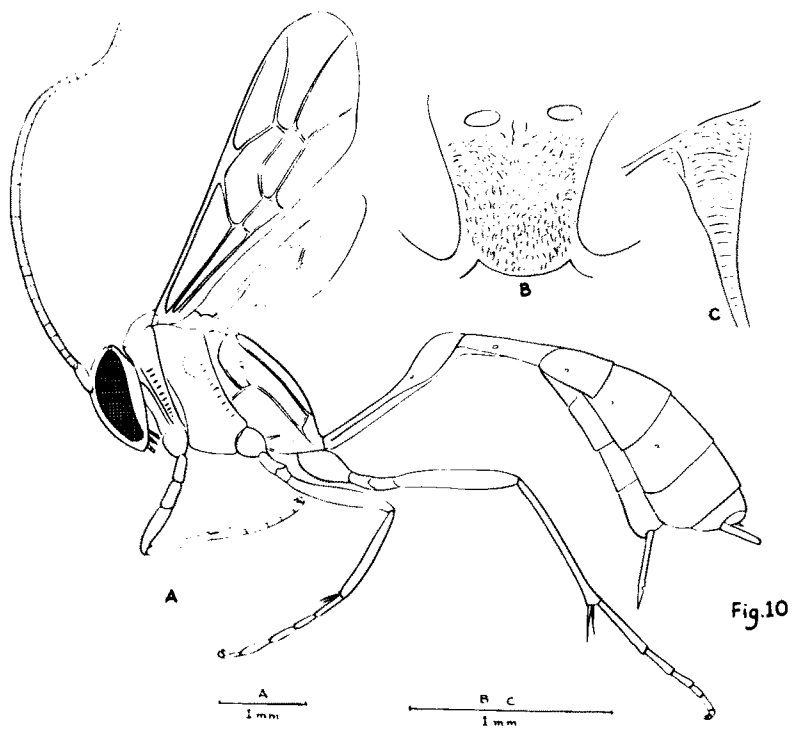
♀ : 9.40 mm. Head 0.92 times as long as broad, in profile 1.09 times as long as high; vertex subpolished; ocellar triangle coarse; lateral ocelli separated from eye by 0.60 of its diameter; inter ocellar distance 2.20 times the ocello-ocular distance; frons rugoso-punctate and mat; antenna 2 + 38 segmented; pedicel 0.60 times as long as broad; first flagellar segment 3 times as long as broad; apical flagellar segment 1.33 times as long as

broad; face rugoso-punctate and mat, weakly convex, 1.71 times as long as broad; clypeus moderately rugoso-punctate and mat, its apical margin convex, 3.50 times as long as broad; mandible weakly punctate, teeth equal, 1.60 times as long as broad; cheek moderately punctate, 0.75 times as long as basal width of mandible; occiput finely punctate; temple very short, finely punctate; occipital carina complete, genal carina joining the oral carina above the base of the mandible.

Thorax 1.81 times as long as broad; collar depressed, coarse; epomia flanged, reaching dorsally to the collar; pronotum transversely striate except rugose dorsally; mesoscutum strongly convex, rugoso-punctate and mat; scutellum 1.25 times as long as broad, with strong lateral carinae upto apex; postscutellum short, convex; propodeum with carinae; areola absent; spiracle elliptical, 1.66 times as long as broad; propleurum coarse; mesopleurum rugoso-striate, lower part closely rugose and mat; speculum rugoso-striate; prepectal carina strong, reaching the tegular region; mesopleural suture clear; mesepimeron small not raised; postpectal carina complete; metapleurum rugose; juxta-coxal carina strong, reaching to the base of hind coxa; submetapleural carina strong, reaching to the base of hind coxa; hind tarsal claw large, weakly curved, 3.33

FIGURE 10. CHAROPS RUGOSPUNCTATUM SP.NOV.

- A. Lateral view, entire
- B. Head, front view, showing face and clypeus
- C. Pronotum



times as long as broad; femur 6.36 times as long as broad; first abscissa of radius 0.62 times the length of its second abscissa; areolet absent; first intercubitus 2 times the length of second abscissa of cubitus, as long as length of second recurrent vein; second recurrent with single bulla, 0.20 times the length of basal abscissa of subdiscoideus; basal abscissa of the subdiscoideus 1.08 times the length of apical abscissa of discocubitus; discocubitus strongly arched; nervulus distad by 2 times its length, 2.75 times the length of postnervulus; basal abscissa of postnervulus 0.75 times the length of its apical abscissa; second discoidal cell 4.20 times as long as broad; discocubital cell 3 times as long as broad; hind wing 2.56 mm long, 0.60 mm broad, with 0 + 5 hamuli; basal abscissa of radiella 0.30 times the length of its apical abscissa; mediella strongly arched; basal abscissa of cubitella 1.20 times the length of its apical abscissa; nervellus present, superior nervellar abscissa 2 times the length of inferior nervellar abscissa, brachiella absent.

Abdomen 2.65 times the length of head and thorax combined; first tergite 15.83 times as long as broad at its base, postpetiole knob like, finely punctate, mat; spiracle elliptical, 3 times as long as broad; median dorsal carinae absent, dorsolateral carinae very strong

and complete; ventro-lateral carinae strong and complete; sternum not free; second tergite 0.84 times the length of first tergite, 8 times as long as broad, finely punctate, mat; 3rd and 7th tergites finely punctate and mat; cerci short; ovipositor sheath 0.29 times the length of hind tibia, 0.78 times as long as the third abdominal segment ; ovipositor stout, straight, pointed, with subterminal notch.

Black . Scape, pedicel yellowish-white, flagellum brown, mandible yellowish with brown base palpi yellowish-white, hind trochater and base of femur yellow; middle legs pale yellow, coxae largely black; last two tarsomeres brown; tegulae yellow; abdomen reddish, brown, petiole black at base, second tergite black basally, brown ventrally; 3rd and 5th tergites brown ; last two abdominal tergites black dorsally, brown laterally and ventrally.

♂ : Very similar to female except rugosities in lower part of mesopleurum stronger; two apical segments of abdomen black. The rod-like arms of paramere present.

Host : Achaea janata Linn. (Noctuidae - Lepidoptera)

Holotype: ♀, INDIA : Maharashtra, Sangli, 21 IX  
1987, on wing, D.G.Patil Coll. Antenna,  
wings, legs mounted on slides and  
labelled as above.

Paratype : 3 ♀♀, 10♂♂ X, 1987, reared in laboratory rest  
data same as above.

### DISCUSSION

According to the key to the Oriental species of charops Holmgren given by Gupta and Maheshwary (1970), this species runs close to C. brachypterum (Cameron) in the characters of vertex, ocelli, prepectal carinae, metapleuron, hind femur and body colouration. But differs from the same in having 1. mat body sculpture in general 2. face rugoso-punctate 3. clypeus moderately rugoso-punctate, 4. pronotum dorsally rugose, 5. ovipositor sheath 0.78 times as long as the third abdominal segment.



GENUS DIADEGMA FOERSTER (1868)

Diadegma belongs to the tribe porizontini, subfamily porizontinae, family Ichneumonidae (Hymenoptera). This is a very large genus of world wide distribution.

Horstamann (1969) and Townes (1970) have given full synonymical references of this genus. This is a genus of controversial history and its limits are not clearly established. The hosts are various small or medium sized lepidoptera. They parasitize pluttella xylostella; Phthorimaea operculella, lita ocellatella etc.

Diadegma striatopunctata sp. nov. (Fig. 11)

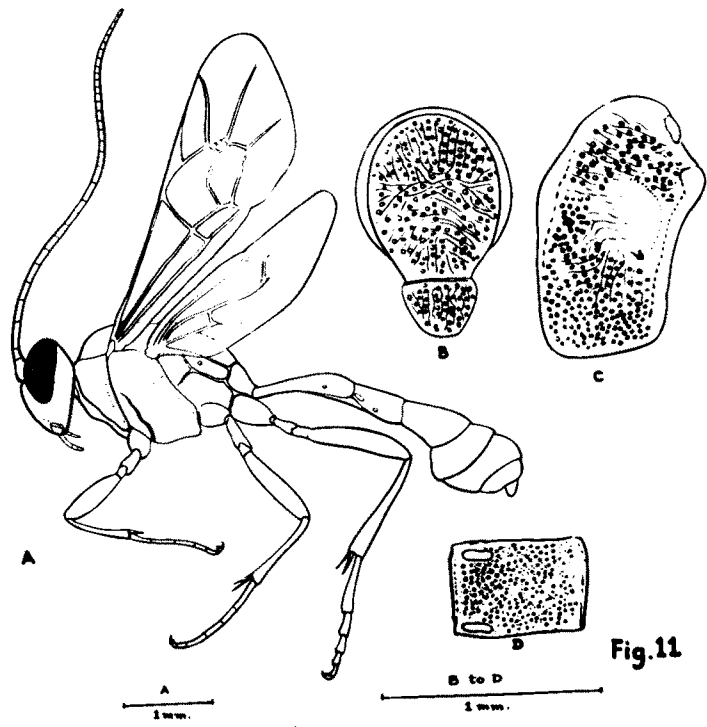
♂: 5.80 mm. Head 0.92 times as long as broad, in profile 1.84 times as long as broad; vertex granular, rugosopunctate; ocellar triangle closely punctate; lateral ocelli separated from eye by 2 times its diameter; interocellar distance 1.20 times of ocello-ocular distance; frons rugosopunctate, granulose; antenna 2 + 30 segmented; scape 2.83 times as long as broad; pedicel 0.32 times as long as broad; first flagellar segment 3.22 times as long as broad; face 0.8 times as long as broad, weakly convex granular,

rugosopunctate; clypeus moderately convex, its apex evenly convex, rugosopunctate; mandible coarse strongly curved, 0.40 times as long as broad; cheek 0.70 times as long as width of mandible; occiput punctate; temple weakly punctate; occipital carina complete; genal carina joining the base of mandible.

Thorax 2.12 times as long as broad; collar narrow; epomia present; pronotum triangular, transversely striatorugose; notaulus absent; mesoscutum strongly convex, closely moderately striatopunctate; scutellum convex, closely longitudinally striatopunctate, 1.25 times as long as broad; postscutellum rugose; propodeum closely striatorugose; areola pentagonal, 1.33 times as long as broad; propodeal spiracle small, circular; mesopleurum striatopunctate dorso-anteriorly, punctate ventro-posterior; speculum transversely strongly striated; mesopleural fovea present; prepectal carina strong, reaching the tegula; mesopleural suture clear, fovea in the form of groove; mesepimeron prominent; postpectal carina strong in the form of flange; metapleurum striatopunctate; submetapleural carina strong reaching the base of hind coxa; hind tarsal claw small, slightly curved, 4 times as long as broad, hind femur 4.16 times as long as broad; hind outer tibial

FIGURE 11. DIADAGMA STRIATOPUNCTATA SP. NOV.

- A. Lateral view, entire
- B. Mesoscutum and scutellum
- C. Mesopleurum
- D. Second abdominal tergite



spur 0.56 times the length of hind basitarsus; tegula 2 times as long as broad; subtegular ridge strong. Forewing 3.70 mm long, 1.24 mm broad; stigma 5.60 times as long as broad; first abscissa of radius 0.56 times the length of its second abscissa; first abscissa of cubitus with one bulla; areolet rectangular, stalked; second intercubitus with one bulla; intercubitus 0.60 times the length of the second intercubitus; second intercubitus 0.50 times the length of second recurrent vein; second recurrent with one bulla, 3.33 times the length of first intercubitus, 2 times the length of 2nd intercubitus; discocubitus strongly curved, unifenestrate; nervulus curved, 0.50 times the length of post nervulus, opposite; second discoidal cell 2.14 times as long as broad; discocubital cell 1.33 times as long as broad; hind wing 2.62 mm. long, 0.64 mm broad, with 1 + 4 hamuli; basal abscissa of radiella present, apical abscissa absent; mediella curved; basal abscissa of cubitella curved apically, apical abscissa absent; nervulus straight; brachiella basally present.

Abdomen 0.31 times the length of head and thorax combined; first tergite shiny, smooth, fine weakly punctate, 6.25 times as long as broad at base, 3.58 times as long as broad at apex; post petiolar part

upcurved, with knob, glymma present; dorsolateral carinae strong, complete; ventrolateral carinae strong complete; second tergite mat, finely closely punctate, apically shiny, 1.66 times as long as broad, 0.60 times the length of first tergite; thyridium elliptical; third tergite basally mat, apically shiny; remaining tergites shiny.

Black. Scape, tegula, yellow; pedicel, tergites second onwards brown; mandibles dark brown; palpi, fore and middle coxae and trochanters yellowish-white; hind coxa, first tergite black; hind trochanter without a black-spot above; all femora reddish brown, all tibiae yellowish -brown.

♀ : unknown

Holotype : ♂, INDIA : Maharashtra : Sangli, 30 VIII 1987, on wing D.G.Patil Coll. Antenna, wings, legs mounted on slides and labelled as above.

Host : Unknown

DISCUSSION

This species resembles with Diadegma varuna Gupta in the characters of face, clypeus, frons, vertex, propodeal carinae, hind tibia, 2nd recurrent vein, tarsal claw and body colouration. But it differs from the same in having 1. mesoscutum closely, moderately striatopunctate, 2. mesopleurum striatopunctate dorsoanteriorly and punctate ventroposteriorly, 3. scutellum closely longitudinally striatopunctate, 4. second abdominal tergite mat, finely closely punctate, 5. thyridium elliptical, and 6. hind trochanter without a black spot above.

GENUS GENOTROPIS TOWNES (1969)

Genotropis belongs to the tribe porizontini, subfamily porizontinae, family Ichneumonidae (Hymenoptera). This is moderate sized genus restricted to the Oriental region. This genus has been described by Townes (1969). Here it is recorded and described for the first time from India. A key to the species of Genotropis is also included.

KEY TO THE SPECIES OF GENOTROPIS TOWNES

Mesopleurum with very fine to moderately coarse wrinkling, often partly mat but not punctate, speculum mat without wrinkling; areola confluent with petiolar area; hind second trochanter brown. Philippines.

..... clara Townes.

Mesopleurum punctate but not wrinkled; speculum finely wrinkled, mat with few punctures posteriorly; areola not confluent with petiolar area; hind second trochanter pale yellow.

..... sangliensis sp. nov.



Genotropis sangliensis sp. nov. (Fig. 12)

♀ : 6.80 mm. Head 0.87 times as long as broad, in profile 1.47 times as long as high; vertex rugosopunctate; ocellar triangle rugosopunctate; lateral ocelli separated from eye by 1.33 its diameter; eye margin moderately indented opposite to antennal socket; frons rugosopunctate; clypeus moderately convex, apical margin narrow and moderately convex, moderately punctate, 0.56 times as long as broad; antenna 2 + 34 segmented; scape 1.66 times as long as broad; pedicel 0.75 times as long as broad; first flagellar segment 3.50 times as long as broad; apical flagellar segment 1.22 times as long as broad; mandible 1.25 times as long as broad, coarse, its lower margin with flange, teeth equal; cheek 0.62 times as long as width of mandible, closely punctate; occipute closely finely punctate; temple closely punctate; occipital carina complete; genal carina joining the base of mandible.

Thorax 1.66 times as long as broad; collar narrow, impunctate; epomia absent; mesoscutum convex, closely finely punctate, mat; notaulus absent; scutellum small, convex, closely punctate; postscutellum narrow and punctate; propodeal, basal area mat, areolar and apical

FIGURE 12. GENOTROPIS SANGLIENSIS SP. NOV.

- A. Lateral view, entire
- B. Head, front view
- C. Propodeum, dorsal view
- D. Mesopleurum

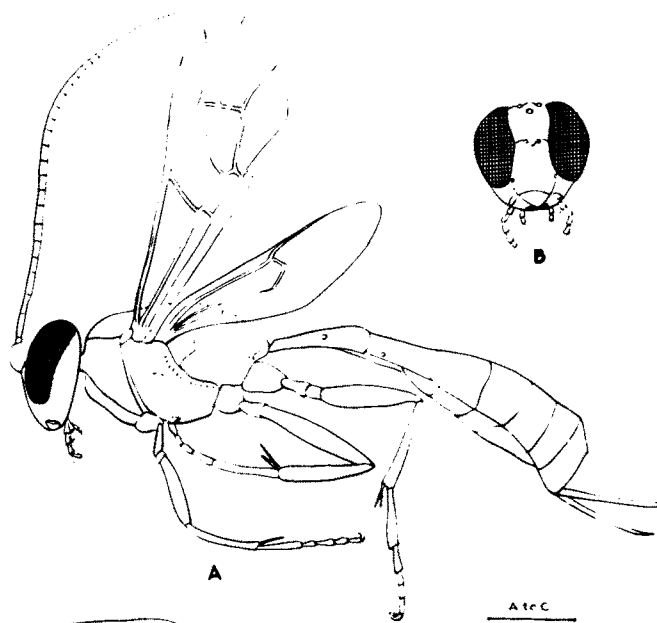


Fig.12

region weakly rugose; areola pentagonal, 1.62 times as long as broad, not confluent with petiolar area; pleural area rugose; spiracle oval, 1.50 times as long as broad; propleurum impunctate; mesopleurum moderately convex, mat, closely moderately punctate, but no wrinkles; speculum finely wrinkled, mat with few punctures posteriorly; mesopleural fovea in the form of deep groove; sternaulus absent; prepectal carina strong and complete; mesopleural suture in the form of groove; mesoepimeron prominent; metapleurum closely moderately punctate; juxtacoxal carina absent; submetapleural carina strong, reaching the base of hind coxa; hind tarsal claw small, slightly curved, pectinate, 2 times as long as broad; hind femur 5.20 times as long as broad; hind outer spur 0.62 times the length of basitarsus; tegula 2.5 times as long as broad; subtegular ridge weak. Forewing 3.80 mm long, 1.2 mm broad; stigma 6.22 times as long as broad; first abscissa of radius curved, 0.50 times the length of its second abscissa; first abscissa of the cubitus strongly curved, with one bulla, areolet open; first intercubitus 2 times the length of second abscissa of cubitus; second intercubitus absent; second recurrent slightly curved with single bulla, two times the length of first intercubitus; discocubitus strongly arched, with single



bulla; basal vein slightly curved; nervellus distad, fenestrate at lower end 0.53 times the length of post nervellus; second discoidal cell 4.12 times as long as broad; discocubital cell 2 times as long as broad; hind wing 2.80 mm long, 0.60 mm broad, with 1 + 3 hamuli; basal abscissa of radiella present, apical abscissa only basally present; mediella arched; basal abscissa of cubitella present, its apical abscissa absent; nervellus not intercepted; brachiella absent.

Abdomen 1.56 times the length of head and thorax combined first tergite 10 times as long as broad at base; 6 times as long as broad at apex, 1.71 times the length of second tergite, mat, shiny, weakly punctate; spiracle small, circular; median dorsal carina absent; dorsolateral and ventrolateral carinae weak, complete; glymma moderate; second tergite mat, shiny, 3.50 times as long as broad at base, 2.33 times as long as broad at apex; thyridium oval; 3rd and 7th tergites shiny, subpolished; ovipositor sheath 0.50 times the length of tibia; ovipositor stout, tip pointed, upcurved.

Black. Scape, tegula, front, middle and hind trochanter pale yellow; palpi yellowish-white; mandible yellowish-white with brown teeth; front and middle coxa

yellow; hind coxa with pale yellow mark; femora, tibiae, post petiolar region of first tergite 2nd to 6th tergites brown; 7th tergite yellowish-brown.

♂: Essentially similar to female except in having small size.

Holotype : ♀, INDIA : Maharashtra : Sangli, 6 IX 1987, on wing, D.G. Patil Coll. Antenna, wings, legs mounted on slides and labelled as above.

Paratype : 2 ♀♀, 2 ♂♂, 9 IX 1987. Rest data same as above.

Host : Unknown

#### DISCUSSION

According to the key to the genera of porizontini given by Townes (1969), this species fits completely with Genotropis clara Townes in the characters of face, clypeus, frons, vertex, mandible, genal carina, postpectal carina, claws, nervulus, ovipositor and body

colouration. But differs from the same in having 1. mesopleurum punctate without wrinkles. 2. speculum finely wrinkled, mat with few punctures posteriorly, 3. areola not confluent with petiolar area, 4. propodeal spiracle oval and 5. hind second trochanter pale yellow.